Amendments to and Listing of the Claims:

Please ***amend claims 19, 21 and 23***, without prejudice, as shown below in the following listing of all claims ever presented. The following listing of claims replaces all prior versions thereof.

1-18. (Canceled)

19. **(Currently Amended)** A plate comprising a cross-directionally worked molybdenum component selected from the group consisting of (i) a molybdenum component containing molybdenum and an alloying element selected from the group consisting of titanium, zirconium, hafnium, carbon, lanthanum oxide, and combinations thereof or (ii) a molybdenum component comprising molybdenum, niobium and an alloying element selected from the group consisting of titanium, zirconium, hafnium, carbon, lanthanum oxide, and combinations thereof or (iii) a molybdenum component comprising molybdenum, tungsten in an amount ranging from about 1 to about 30 wt. % and an alloying element selected from the group consisting of titanium, zirconium, hafnium, carbon, lanthanum oxide, and combinations thereof; wherein the cross-directionally worked molybdenum component is worked in multiple directions along a single axis of symmetry of the component such that the plate has a radial strength of at least about 60 ksi when the plate is exposed to a temperature of about 1600° C.

20. (Original) The plate of claim 19, wherein the plate further comprises a stem.

21. (Original) An x-ray target comprising:

(a) a plate comprising a cross-directionally worked molybdenum component selected from the group consisting of (i) a molybdenum component containing molybdenum and an alloying element selected from the group consisting of titanium, zirconium, hafnium, carbon, lanthanum oxide, and combinations thereof or (ii) a molybdenum component comprising

molybdenum, niobium and an alloying-element selected from the group consisting of titanium, zirconium, hafnium, carbon, lanthanum oxide, and combinations thereof or (iii) a molybdenum component comprising molybdenum, tungsten in an amount ranging from about 1 to about 30 wt. % and an alloying element selected from the group consisting of titanium, zirconium, hafnium, carbon, lanthanum oxide, and combinations thereof;

wherein the cross-directionally worked molybdenum component is worked in multiple directions along a single axis of symmetry of the component such that the plate has a radial strength of at least about 60 ksi when the plate is exposed to a temperature of about 1600° C.;

(b) a focal track located on a surface of the plate; and

(c) a stem extending from the plate.

22. (Original) The target of claim 21, wherein the stem comprises a worked molybdenum component selected from the group consisting of (i) a molybdenum component containing molybdenum and an alloying element selected from the group consisting of titanium, zirconium, hafnium, carbon, lanthanum oxide, and combinations thereof or (ii) a molybdenum component comprising molybdenum, niobium and an alloying element selected from the group consisting of titanium, zirconium, hafnium, carbon, lanthanum oxide, and combinations thereof or (iii) a molybdenum component comprising molybdenum, tungsten in an amount ranging from about 1 to about 30 wt. % and an alloying element selected from the group consisting of titanium, zirconium, hafnium, carbon, lanthanum oxide, and combinations thereof,

wherein the stem also has a strength of at least about 60 ksi when the stem is exposed to a temperature of about 1600° C.

23. **(Currently Amended)** A cross-directionally worked molybdenum plate having a uniform grain structure, the plate prepared by a process comprising:

(a) reducing ammonium molybdate and forming molybdenum metal powder;

(b) consolidating a molybdenum component comprised of molybdenum metal powder and an alloying element to form a first workpiece having an axis of symmetry, the alloying element being selected from the group consisting of titanium, zirconium, hafnium, carbon, lanthanum oxide, and combinations thereof;

(c) thermally treating the first workpiece and subjecting the workpiece to thermo-mechanical forces in a first direction such that a cross-sectional area of the first workpiece perpendicular to the axis of symmetry is reduced, ~~and~~ thereby forming a second workpiece;

(d) thermally treating the second workpiece and subjecting the second workpiece to thermo-mechanical forces in a second direction such that a cross-sectional area of the second workpiece perpendicular to the axis of symmetry is increased ~~that is different from the first direction~~;

(e) subjecting the thermomechanically treated second workpiece to a recrystallization heat treatment step, and thereby forming a heat-treated cross-directionally worked workpiece; and

(f) subjecting the heat-treated, cross-directionally worked workpiece to a slicing step or a machining step, and thereby forming the cross-directionally worked molybdenum plate.

24. (Previously Presented) The plate according to claim 23 further comprising a stem attached to the plate, wherein thermally treating the second workpiece comprising upset forging in a closed die forging process with a closed die that is dimensioned to form a plate, and wherein the closed die is further dimensioned with a mold for the stem.